

## **ABSTRACT**

1 An interconnect assembly includes a number of interconnect  
2 stages combined in a carrier structure. Each interconnect  
3 stage includes at least two contact sets having an upwards  
4 pointing cantilever contact and a downwards pointing  
5 cantilever contact. The cantilever contacts are attached  
6 to the carrier structure and are arranged around openings  
7 in the carrier structure such that the downward pointing  
8 cantilevers may reach through the carrier structure. Each  
9 contact set defines an independent conductive path between  
10 a single pair of opposing chip and test apparatus contacts  
11 such that multiple conductive paths are available for each  
12 interconnect stage for increased transmission reliability  
13 and reduced resistance. The cantilever contacts have a  
14 meandering contour and are either combined in symmetrical  
15 pairs at their respective tips or are free pivoting. The  
16 meandering contour provides a maximum deflectable  
17 cantilever length within an available footprint defined by  
18 the pitch of the tested chip.